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a fourth layer (L4) for providing application enabling services; and
a fifth layer (L5) for providing distributed system services.

7. A multi-transaction services system according to claim 6, wherein the second, fourth, and fifth layers (L2, L4, L5) comprise the middleware NCR Top End.

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8. A multi-transaction services system according to claim 1, wherein (i) the plurality of channels comprise retail service channels including at least two of a point of sale service, an automatic vending service, and a loyalty card service, and (ii) the operation means comprises at least a relationship database.

add R37

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